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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/604,928

08/27/2003

James Maxwell

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28455 7590 08/20/2008  
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EXAMINER

ROBERTS, LEZAH

ART UNIT

PAPER NUMBER

1612

MAIL DATE

DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/604,928	<b>Applicant(s)</b> MAXWELL ET AL.	
	<b>Examiner</b> LEZAH W. ROBERTS	<b>Art Unit</b> 1612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 May 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 100, 103-115, 117, 118, 120, 126-135 and 137-142 is/are pending in the application.
- 4a) Of the above claim(s) 118, 120, 126-135, 139 and 140 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 100, 103-115, 117, 137, 138, 141 and 142 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

This Office Action is in response to the Request for Continued Examination filed May 28, 2008. All previous rejections have been withdrawn unless stated below.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Election by Original Presentation***

Newly submitted claims 139 and 140 and amended claims 118, 120 and 126-135 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: the claims encompass a non-elected species. Applicant elected chewing gum as the elected species and the recited claims are directed towards a pressed tablet.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 118, 120, 126-135, 139 and 140 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

## ***Claims***

### **Claim Rejections - 35 USC § 102 – Anticipation (Previous Rejections)**

1) Claims 100-104, 105-107, 111-120 and 129-136 were rejected under 35 U.S.C. 102(e) as being anticipated by Hyodo et al. (US 6,537,595). The rejection is maintained in regards to claims 101, 104-107 and 111-117 and further applied to claims 137 and 138. Claims 118, 120 and 129-135 are withdrawn.

### **Applicant's Arguments**

Applicant argues there is no suggestion in Hyodo et al. to use cardamom oil as an antibacterial agent in chewing gum or other confection. Applicant further argues the term "effective amount" in the claim introduces a purpose limitation that has to be considered when comparing the claim to the prior art. The previous office action recognizes that new uses for known compositions are patentable, but assert that only method claims are patentable under this rationale. As shown in In re Halleck, both method claims and composition claims are patentable when the claim calls for an effective amount of the ingredient for a purpose which is not obvious for the ingredient in the composition (see remarks, page 9). This argument is not persuasive.

### **Examiner's Response**

Although Hyodo et al. does not disclose the anti-microbial effect of cardamom oil, cardamom oil has been disclosed by the art to have antibacterial activity. The art even suggest using cardamom in dental compositions because of its effectiveness against S.

mutans<sup>1</sup>. Therefore the oil is recognized to have anti-microbial activity as recited in the instant claims. The Hyodo et al. also discloses the amount encompassed by the instant claims and therefore it is inherent and even expected to have antibacterial activity.

**Claim Rejections - 35 USC § 103 – Obviousness (Previous Rejections)**

1) Claims 108-110 were rejected under 35 U.S.C. 103(a) as being unpatentable over Hyodo et al. (US 6,537,595) in view of Zamudio-Tena et al. (US 4,828,845). This rejection is maintained and further applied to claims 141 and 142.

**Applicant's Arguments**

Applicant argues Zamudio-Tena discloses xylitol coated comestibles. There is no suggestion in Zamudio-Tena of using cardamom oil, or that cardamom oil can be used as an antimicrobial agent. Thus, even if Hyodo was combined with Zamudio-Tena, the resulting combination would not suggest a chewing gum composition comprising a gum base; a sweetener; a flavor; and an effective amount of an antimicrobial agent wherein the antimicrobial agent comprises cardamom oil. This argument is not persuasive.

**Examiner's Response**

See Examiner's response above in regards to Hyodo et al. The secondary reference, Zamudio-Tena et al., is used to disclose that some chewing gums are coated and at times flavorings are incorporated into the coatings of chewing gums. It would have been obvious to one of ordinary skill in the art to have used a coating on the

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<sup>1</sup> Singh et al., "From Ethnolmycology to Fungal Biotechnology: Exploiting Fungi from Natural Resources

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chewing gums of the primary reference to make a gum with good appearance, good texture, good flexibility, good film-forming properties and good crunchiness. In regards to the antimicrobial activity of the cardamom oil, cardamom oil is known to have antibacterial activity. That being said, the cardamom oil will inherently have the antimicrobial function as recited in the instant claims since the oil in the compositions is used in the same amounts as those disclosed by the instant specification.

**Claim Rejections - 35 USC § 103 – Obviousness (New Rejection)**

Claims 100, 105, 111-115 and 117 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirose et al. (US 5,149,521).

Hirose et al. disclose oral compositions comprising (A) an easily breakable granule; (B) a menthol and/or a natural substance containing menthol; and (C) a flavoring component. The oral compositions may be formulated into chewing gums (col. 5, lines 50-55 and claim 5). The flavoring components (C) include cardamom oil (See example 3) and comprise 1 ppm to 10% of the flavoring composition (which is at the most 1% of the total composition). The flavoring composition comprises 0.1% to 10% of the oral compositions. Component (B) includes peppermint oil. Other components include sweetening agents such as sorbitol. Component (A) may include glycyrrhetic acid and salts thereof, quaternary ammonium salts, sodium chloride, chlorohexidine, zinc salts, phosphate such as sodium metaphosphate and calcium pyrophosphate, and organic acids (col. 2, line 50- col. 4, line 25). The reference differs from the instant

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claims insofar as it does not disclose an example comprising cardamom in a chewing gum of at a concentration recited in the instant claims.

Normally, changes in result effective variables are not patentable where the difference involved is one of degree, not of kind; experimentation to find workable conditions generally involves the application of no more than routine skill in the art. See MPEP 2144.05 II. Cardamom oil has antibacterial activity (see footnote). The cardamom oil in the reference may be used in amounts up to 1%. When formulating a chewing gum, it would have been obvious to one of ordinary skill in the art to have incorporated cardamom oil in an amount, encompassed by the reference, that would achieve the desired effect of acting as a flavoring as well as adjusting the amount of cardamom oil to achieve its known antibacterial activity, especially in view of the intended use of the type of compositions disclosed by the reference, which is to treat the oral cavity or deliver pharmaceuticals to the oral cavity.

Claims 100, 103-115, 117, 137, 138, 141 and 142 are rejected.

Claims 118, 120, 126-135, 139 and 140 are withdrawn.

No claims allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LEZAH W. ROBERTS whose telephone number is (571)272-1071. The examiner can normally be reached on 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frederick F. Krass can be reached on 571-272-0580. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Lezah W Roberts/  
Examiner, Art Unit 1612

/Frederick Krass/  
Supervisory Patent Examiner, Art Unit 1612